

CLAIMS

1. A decoy nucleic acid, which can inhibit promoter activity by binding to the transcription factor of the Synoviolin gene promoter.
- 5 2. A decoy nucleic acid selected from the following (a) or (b):
 - (a) A decoy nucleic acid consisting of a nucleic acid sequence as shown in SEQ ID NO: 11 or 12; or
 - (b) A decoy nucleic acid consisting of a nucleic acid sequence as shown in SEQ ID NO: 11 or 12 having deletion, substitution or addition of one or several nucleic acids, and has a function of inhibiting Synoviolin gene promoter activity.
- 10 3. A decoy nucleic acid selected from the following (a) or (b):
 - (a) A decoy nucleic acid consisting of a nucleic acid sequence as shown in SEQ ID NO: 11 and 12; or
 - (b) A decoy nucleic acid consisting of a nucleic acid sequence as shown in SEQ ID NO: 11 and 12 having deletion, substitution or addition of one or several nucleic acids, and has a function of inhibiting Synoviolin gene promoter activity.
- 15 4. The nucleic acid according to claim 2 or 3, wherein the function of inhibiting the Synoviolin gene promoter activity is a function of binding with a transcription factor of the Synoviolin gene promoter.
- 20 5. The nucleic acid according to any one of claims 1 to 4, which is designed based on a nucleotide sequence at the transcription factor binding site selected from a group consisting of EBS, SBS and ABS.
- 25 6. The nucleic acid according to any one of claims 1 to 5, which is able to induce apoptosis in a synovial cell or a cancer cell.
7. A pharmaceutical composition containing the nucleic acid according to any one of claims 1 to 6 for treating and preventing diseases attributed to the expression of the Synoviolin gene.
- 30 8. The pharmaceutical composition according to claim 7, further containing a pharmaceutically acceptable carrier.
9. The pharmaceutical composition according to claim 7 or 8, wherein the disease is at least one selected from the group consisting of rheumatoid arthritis, fibrosis, cancers, and cerebral and neural diseases.

10. A method of inhibiting the transcription activity of the Synoviolin transcription factor using the nucleic acid according to any one of claims 1 to 6.
11. A method of inhibiting the Synoviolin promoter activity using the nucleic acid according to any one of claims 1 to 6.
- 5 12. A method of suppressing the expression of Synoviolin by inhibiting the Synoviolin promoter activity using the nucleic acid according to any one of claims 1 to 6.
13. A method of inducing apoptosis in a synovial cell or a cancer cell using the nucleic acid according to any one of claims 1 to 6.